

**CLAIM AMENDMENTS**

1-24. (Cancelled)

25. (New) A method in a computer system for distributing lists of available channels to subscriber units, each channel being assigned an IP multicast group, the method comprising:

receiving from a subscriber unit a request for a list of available channels, the request including information identifying a subscriber and being sent using HTTP protocol; and

upon receiving the request,

identifying one or more available channels that the identified subscriber is permitted to access; and

sending to the subscriber unit a response to the received request with an indication of the identified channels, the response being sent using HTTP protocol and identifying the IP multicast group assigned to each identified channel.

26. (New) The method of claim 25 whereby when the subscriber selects to access a channel indicated in the response, the subscriber unit sends to an IP router a request to join the IP multicast group assigned to the channel selected to be accessed and whereby the IP router routes the data of the selected channel to the subscriber unit.

27. (New) The method of claim 25 wherein the identifying of one or more available channels identifies less than all of the available channels.

28. (New) The method of claim 25 wherein the response is sent via unicast to the subscriber unit.

29. (New) The method of claim 25 wherein available channels are provided to the computer system by receiving from a plurality of content providers indications of channels that are made available by that content provider.

30. (New) The method of claim 29 wherein an indication that a channel is made available by a content provider is sent using a session announcement protocol.

31. (New) The method of claim 29 wherein each available channel has a channel source address that is provided by the content provider.

32. (New) The method of claim 31 wherein the channel source address is an IP address.

33. (New) The method of claim 31 wherein the channel source address is an ATM channel.

34. (New) The method of claim 31 wherein the channel source address is an ATM virtual path and transmission circuit.

35. (New) The method of claim 25 wherein when a subscriber selects to receive an available channel indicated in a response, the subscriber unit sends a request to join the IP multicast group associated with the selected channel.

36. (New) The method of claim 25 wherein the computer system is located at a central office.

37. (New) The method of claim 36 wherein a subscriber unit is connected to the computer system via a DSL connection.

38. (New) The method of claim 25 wherein an available channel is a channel whose data is currently being multicasted.

39. (New) The method of claim 25 wherein the subscriber is identified using a media access control address.

40. (New) The method of claim 25 wherein the subscriber is identified using an IP address.

41. (New) The method of claim 25 including providing a subscribed channel list for a subscriber that indicates the channels which the subscriber is permitted to access.

42. (New) The method of claim 25 wherein data for a channel is received at the computer system and forwarded to the subscriber unit.

43. (New) The method of claim 42 wherein data received at the computer system is sent via a switched virtual circuit.

44. (New) The method of claim 25 wherein a multicast group is identified by an IP address.

45. (New) The method of claim 25 wherein the request is sent in response to the subscriber requesting to view the list.

46. (New) A method in a computer system for distributing lists of available channels to subscriber units, the method comprising:

receiving from a subscriber unit a request for a list of available channels, the request including information identifying a subscriber and being sent using HTTP protocol; and

upon receiving the request,  
identifying one or more channels that the identified subscriber is authorized  
to access; and  
sending to the subscriber unit a response with an indication of the identified  
channels, the response being sent using HTTP protocol.

47. (New) The method of claim 46 wherein the identifying of one or more  
available channels identifies less than all of the available channels.

48. (New) The method of claim 46 wherein the response is sent via unicast to  
the subscriber unit.

49. (New) The method of claim 46 wherein available channels are provided to  
the computer system by receiving from a plurality of content providers indications of  
channels that are made available by that content provider.

50. (New) The method of claim 46 wherein the computer system is located at a  
central office.

51. (New) The method of claim 50 wherein a subscriber unit is connected to the  
computer system via a DSL connection.

52. (New) The method of claim 46 wherein the subscriber is identified using a  
media access control address.

53. (New) The method of claim 46 wherein the subscriber is identified using an  
IP address.

54. (New) The method of claim 46 including providing a subscribed channel list for a subscriber that indicates the channels which the subscriber is permitted to access.

55. (New) The method of claim 46 wherein data for a channel is received at the computer system and forwarded to the subscriber unit.

56. (New) The method of claim 55 wherein data received at the computer system is sent via a switched virtual circuit.

57. (New) The method of claim 46 wherein the request is sent in response to the subscriber requesting to view the list.

58. (New) A method in a computer system for distributing lists of available channels to subscriber units, each channel being assigned a multicast group, the method comprising:

- receiving from a subscriber unit a request for a listing of available channels, the request being sent in response to a subscriber indicating to view the listing, the request being sent using HTTP protocol; and
- upon receiving the request,
  - identifying channels that are available to be accessed; and
  - sending to the subscriber unit a response with an indication of the identified channels, the response being sent using HTTP protocol and identifying the multicast group assigned to each identified channel.

59. (New) The method of claim 58 whereby when the subscriber selects to access a channel indicated in the response, the subscriber unit sends to an IP router a request to join the multicast group assigned to the channel selected to be accessed and whereby the IP router routes the data of the selected channel to the subscriber unit.

60. (New) The method of claim 58 wherein the response is sent via unicast to the subscriber unit.

61. (New) The method of claim 58 wherein available channels are provided to the computer system by receiving from a plurality of content providers indications of channels that are made available by that content provider.

62. (New) The method of claim 61 wherein an indication that a channel is made available by a content provider is sent using a session announcement protocol.

63. (New) The method of claim 61 wherein each available channel has a channel source address that is provided by the content provider.

64. (New) The method of claim 63 wherein the channel source address is an IP address.

65. (New) The method of claim 63 wherein the channel source address is an ATM channel.

66. (New) The method of claim 63 wherein the channel source address is an ATM virtual path and transmission circuit.

67. (New) The method of claim 58 wherein when a subscriber selects to receive an available channel indicated in a response, the subscriber unit sends a request to join the multicast group associated with the selected channel.

68. (New) The method of claim 58 wherein the computer system is located at a central office.

69. (New) The method of claim 58 wherein a subscriber unit is connected to the computer system via a DSL connection.

70. (New) The method of claim 58 wherein an available channel is a channel whose data is currently being multicasted.

71. (New) The method of claim 58 wherein data for a channel is received at the computer system and forwarded to the subscriber unit.

72. (New) The method of claim 71 wherein data received at the computer system is sent via a switched virtual circuit.

73. (New) The method of claim 58 wherein a multicast group is identified by an IP address.

74. (New) The method of claim 58 wherein the request is sent in response to the subscriber requesting to view the list.

75. (New) A method in a computer system for distributing lists of available channels to subscriber units, each channel being assigned an IP address, the method comprising:

receiving from a subscriber unit a request for a list of available channels, the request being sent using HTTP protocol and in response to a subscriber requesting to view the list; and

upon receiving the request,

identifying one or more channels; and

sending to the subscriber unit a response with an indication of the identified channels, the response being sent using HTTP protocol.

76. (New) The method of claim 75 wherein the response is sent via unicast to the subscriber unit.

77. (New) The method of claim 75 wherein available channels are provided to the computer system by receiving from a plurality of content providers indications of channels that are made available by that content provider.

78. (New) The method of claim 75 wherein the computer system is located at a central office.

79. (New) The method of claim 78 wherein a subscriber unit is connected to the computer system via a DSL connection.

80. (New) The method of claim 75 wherein data for a channel is received at the computer system and forwarded to the subscriber unit.

81. (New) A method in a computer system for distributing lists of available channels to subscriber units, data of the channels being transmitted via multicasting, the method comprising:

receiving from a subscriber unit a request for a listing of available channels, the request including information identifying a subscriber; and

upon receiving the request,

identifying one or more channels that the identified subscriber is permitted to access; and

sending to the subscriber unit a response with an indication of the identified channels, the response identifying a multicast group assigned to each identified channel.



82. (New) The method of claim 81 whereby when the subscriber selects to access a channel indicated in the response, the subscriber unit sends to an IP router a request to join the multicast group assigned to the channel selected to be accessed and whereby the IP router routes the data of the selected channel to the subscriber unit.

83. (New) The method of claim 81 wherein the response is sent via unicast to the subscriber unit.

84. (New) The method of claim 81 wherein available channels are provided to the computer system by receiving from a plurality of content providers indications of channels that are made available by that content provider.

85. (New) The method of claim 84 wherein an indication that a channel is made available by a content provider is sent using a session announcement protocol.

86. (New) The method of claim 84 wherein each available channel has a channel source address that is provided by the content provider.

87. (New) The method of claim 86 wherein the channel source address is an IP address.

88. (New) The method of claim 86 wherein the channel source address is an ATM channel.

89. (New) The method of claim 86 wherein the channel source address is an ATM virtual path and transmission circuit.

90. (New) The method of claim 81 wherein when a subscriber selects to receive an available channel indicated in a response, the subscriber unit sends a request to join the multicast group associated with the selected channel.

91. (New) The method of claim 81 wherein the computer system is located at a central office.

92. (New) The method of claim 91 wherein a subscriber unit is connected to the computer system via a DSL connection.

93. (New) The method of claim 81 wherein an available channel is a channel whose data is currently being multicasted.

94. (New) The method of claim 81 wherein the subscriber is identified using a media access control address.

95. (New) The method of claim 81 wherein the subscriber is identified using an IP address.

96. (New) The method of claim 81 including providing a subscribed channel list for a subscriber that indicates the channels which the subscriber is permitted to access.

97. (New) The method of claim 81 wherein data for a channel is received at the computer system and forwarded to the subscriber unit.

98. (New) The method of claim 97 wherein data received at the computer system is sent via a switched virtual circuit.

99. (New) The method of claim 81 wherein a multicast group is identified by an IP address.

100. (New) The method of claim 81 wherein the request is sent in response to the subscriber requesting to view the list.